

**SEMICONDUCTOR DEVICES
AND MANUFACTURING METHODS THEREOF**

ABSTRACT OF THE DISCLOSURE

In a circuit configuration comprising an n-channel thin-film transistor and a p-channel thin-film transistor integrally produced on a single substrate, a lightly-doped drain (LDD) region is formed selectively in the n-channel thin-film transistor, and damages to semiconductor layers caused when implanting impurity ions are balanced between the n- and p-channel thin-film transistors. This configuration achieves a balance between the n- and p-channel thin-film transistors and thereby provides high characteristics CMOS circuit.